

- C1
- a. providing a platen having two substantially parallel planar surfaces, an inner layer of hydrophilic material, two outer layers of hydrophobic material coupled to opposite sides of the inner layer, and a two-dimensional array of a plurality of addressable through-holes, the through-holes being disposed substantially perpendicularly to the planar surfaces and the array characterized by an areal density of at least 1.6 through-holes per square millimeter;
  - b. loading a first sample into a first set of through-holes of the two-dimensional array, the first sample being a liquid;
  - c. retaining the first sample in the first set of through-holes by surface tension;
  - d. adding a second sample into a specified through-hole, the specified through-hole having at least one adjacent through-hole containing a sample other than the second sample, the specified through-hole further coinciding with one of the first set of at least one of the through-holes thereby permitting a reaction between the first sample and the second sample; and
  - e. characterizing the reaction in the through-hole in terms of the specified properties.
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**14. (amended three times)** A method for characterizing a plurality of samples of distinct composition, the method comprising:

- C2
- a. providing a platen having a set of through-holes comprising a two-dimensional array with a density of at least 1.6 through-holes per square millimeter;
  - b. loading a specified sample into each through-hole of a first subset of the set of through-holes;
  - c. loading a second sample into at least one through-hole adjacent to a hole of the first subset of through-holes in such a manner as to substantially prevent capillary outmigration of the second sample; and
  - d. characterizing a property of the specified sample.
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C3

**16. (amended three times)** A method for analyzing a plurality of samples, the system comprising:

- a. loading the samples into a plurality of through-holes disposed in a platen in a two-dimensional array characterized by an areal density of at least 1.6 through-holes per square millimeter;
- b. illuminating a set of more than one of the plurality of through-holes with optical radiation; and
- c. separately analyzing the optical radiation emanating from each through-hole of the set of more through-holes than one using an optical arrangement including a detector array.

C4

**17. (amended)** A method in accordance with claim 16, wherein the step of analyzing includes spectrally characterizing the optical radiation emanating from the plurality of through-holes.

**41. (amended)** A method for characterizing a plurality of samples, the method comprising:

- C5
- a. providing a platen having a two-dimensional array of through-holes;
  - b. loading a specified sample into each through-hole of a subset of the set of through-holes with a density of at least 1.6 through-holes per square millimeter; and
- characterizing a property of the specified sample.

#### REMARKS

Claims 1, 3-17, 41, and 44 are pending in the application.

Claims 1, 14, 16 and 41 are independent claims, while claims 3-13 depend directly or indirectly from claim 1, claim 15 depends from claim 14, claim 17 depends from claim 16, and claim 44 is multiply dependent upon claims 14, 16, and 41.

Claims 1, 3, 5-15, 41 and 44 stand rejected under 35 U.S.C. 112, first paragraph, as inadequately described, while claims 14-15 and 17 stand rejected under 35 U.S.C. 112, second paragraph, as indefinite.

Claims 1, 3-15, 41 and 44 stand rejected under 35 U.S.C. 103(a) as unpatentable over de Macario in view of Davis. Claims 16-17 (the other pending claims), and also